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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,926	12/14/2004	Petrus Johannes Lenoir	NL 020543	7022

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BRIARCLIFF MANOR, NY 10510

EXAMINER

LOUIE, OSCAR A

ART UNIT	PAPER NUMBER
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2136

MAIL DATE	DELIVERY MODE
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11/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,926	LENOIR ET AL.	
	Examiner	Art Unit	
	Oscar A. Louie	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This first non-final action is in response to the original filing of 12/14/2004. Claims 1-12 are pending and have been considered as follows.

Specification

1. The disclosure is objected to because of the following informalities:
2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7, 9, & 12 are rejected under 35 U.S.C. 102(e) as being anticipated by

Koehler (US-6301658-B1).

Claim 1:

Koehler discloses a system comprising a plurality of devices comprising,

- “said plurality comprising at least a first device and a second device” (i.e. “the invention is a method for authenticating a user digital certificate issued by a certification authority (CA) belonging to a hierarchy of certification authorities (CA's) having a root CA”) [column 3 lines 45-47];
- “the devices of said plurality being assigned a respective device identifier” (i.e. “Owner information 15 identifies the owner of digital certificate 10 and typically includes information such as the owner's name, address and organization”) [column 5 lines 2-5];
- “the first device being arranged to authenticate itself to the second device by presenting to the second device a group certificate identifying a range of non-revoked device identifier” (i.e. “Public key 20 is the owner's public key that can be used to authenticate any message sent by the owner. Certificate 10 is used to establish the authenticity of the owner's public key 20”) [column 5 lines 5-8];
- “said range encompassing the device identifier of the first device” (i.e. “CA information 35 may identify a particular group or branch within an organization”) [column 5 lines 15-17].

Claim 2:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- “the respective device identifiers correspond to leaf nodes in a hierarchically ordered tree” (i.e. “Serial number 30 is a unique number generated by a certification authority (CA) and is used to identify certificate 10. CA information 35 identifies the certification authority that issued certificate 10”) [column 5 lines 12-15];
- “the group certificate identifies a node in the hierarchically ordered tree” (i.e. “Serial number 30 is a unique number generated by a certification authority (CA) and is used to identify certificate 10. CA information 35 identifies the certification authority that issued certificate 10”) [column 5 lines 12-15];
- “said node representing a subtree in which the leaf nodes correspond to the range of non-revoked device identifier” (i.e. “CA digital signature 40 is the digital signature of the issuing certificate authority and is used to verify that certificate 10 is authentic and indeed issued by the authority identified in CA information 35”) [column 5 lines 17-20].

Claim 3:

Koehler discloses a system comprising a plurality of devices, as in Claim 2 above, further comprising,

- “the group certificate further identifies a further node in the subtree” (i.e. “Serial number 30 is a unique number generated by a certification authority (CA) and is used to identify certificate 10. CA information 35 identifies the certification authority that issued certificate 10”) [column 5 lines 12-15];

- “said further node representing a further subtree in which the leaf nodes correspond to device identifiers excluded from the range of non-revoked device identifier” (i.e. “Serial number 30 is a unique number generated by a certification authority (CA) and is used to identify certificate 10. CA information 35 identifies the certification authority that issued certificate 10”) [column 5 lines 12-15].

Claim 7:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- “a single group certificate identifies plural respective ranges of non-revoked device identifiers” (i.e. “CA information 35 may identify a particular group or branch within an organization”) [column 5 lines 15-17].

Claim 9:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- “the group certificate comprises an indication of a validity period and the second device authenticates the first device if said validity period is acceptable” (i.e. “Validity period 25 typically defines a period of time for which certificate 10 is valid. Certificate 10 is considered expired beyond validity period 25 in which case public key 20 may no longer be used to authenticate messages”) [column 5 lines 8-10].

Claim 12:

Koehler discloses a first device comprising,

- “being assigned a device identifier” (i.e. “Owner information 15 identifies the owner of digital certificate 10 and typically includes information such as the owner's name, address and organization”) [column 5 lines 2-5];
- “being arranged to authenticate itself to a second device by presenting to the second device a group certificate identifying a range of non-revoked device identifiers” (i.e. “Public key 20 is the owner's public key that can be used to authenticate any message sent by the owner. Certificate 10 is used to establish the authenticity of the owner's public key 20”) [column 5 lines 5-8];
- “said range encompassing the device identifier of the first device” (i.e. “CA information 35 may identify a particular group or branch within an organization”) [column 5 lines 15-17].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler (US-6301658-B1).

Claim 4:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- “the group certificate identifies a subrange of the sequentially ordered range” (i.e. “Serial number 30 is a unique number generated by a certification authority (CA) and is used to identify certificate 10. CA information 35 identifies the certification authority that issued certificate 10”) [column 5 lines 12-15];
- “said subrange encompassing the range of non-revoked device identifier” (i.e. “CA digital signature 40 is the digital signature of the issuing certificate authority and is used to verify that certificate 10 is authentic and indeed issued by the authority identified in CA information 35”) [column 5 lines 17-20];

but does not explicitly disclose,

- “the respective device identifiers are selected from a sequentially ordered range”

however, Koehler does disclose,

- “Verification cache 70 is organized for efficient lookup of an item and, in one embodiment, is organized by owner and information type” [column 6 lines 3-5];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant’s invention to include, “the respective device identifiers are selected from a sequentially ordered range,” in the invention as disclosed by Koehler for the purposes of organized and efficient lookup of an item.

Claim 8:

Koehler discloses a system comprising a plurality of devices, as in Claim 7 above, but does not explicitly disclose,

- “the plural respective ranges in the single group certificate are sequentially ordered”
- “the single group certificate identifies the plural respective ranges through an indication of the lowest and highest respective ranges in the sequential ordering”

however, Koehler does disclose,

- “Verification cache 70 is organized for efficient lookup of an item and, in one embodiment, is organized by owner and information type” [column 6 lines 3-5];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant’s invention to include, “the plural respective ranges in the single group certificate are sequentially ordered” and “the single group certificate identifies the plural respective ranges through an indication of the lowest and highest respective ranges in the sequential ordering,” in the invention as disclosed by Koehler for the purposes of organized and efficient lookup of an item.

7. Claims 5, 6, 10, & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler (US-6301658-B1) in view of Elley et al. (US-6883100-B1).

Claim 5:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- “if the device identifier of at least one device in the system falls within the particular range identified in said received group certificate” (i.e. “Validity period 25 typically

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defines a period of time for which certificate 10 is valid. Certificate 10 is considered expired beyond validity period 25 in which case public key 20 may no longer be used to authenticate messages”) [column 5 lines 8-10];

but, Koehler does not disclose,

- “a gateway device arranged to receive a group certificate from an external source”
- “a gateway device arranged to distribute said received group certificate to the devices in the system”

however, Elley et al. do disclose,

- “The network cloud 102 may contain transmission lines, repeaters, routers, network backbones, network interconnect points, etc., depending upon the extent of the network which it represents” [column 7 lines 4-7];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant’s invention to include, “a gateway device arranged to receive a group certificate from an external source” and “a gateway device arranged to distribute said received group certificate to the devices in the system,” in the invention as disclosed by Koehler since a gateway device may be a router.

Claim 6:

Koehler discloses a system comprising a plurality of devices, as in Claim 5 above, further comprising,

- “the gateway device further being arranged to cache at least a subset of all the received group certificates” (i.e. “verification server 60 maintains verification cache 70”) [column 5 lines 64-65].

Claim 10:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- “the second device is arranged to successfully authenticate the first device” (i.e. “Public key 20 is the owner’s public key that can be used to authenticate any message sent by the owner. Certificate 10 is used to establish the authenticity of the owner’s public key 20”) [column 5 lines 5-8];
- “if a version indication in the group certificate is at least equal to the indication of the lowest acceptable certificate version” (i.e. “Validity period 25 typically defines a period of time for which certificate 10 is valid. Certificate 10 is considered expired beyond validity period 25 in which case public key 20 may no longer be used to authenticate messages”) [column 5 lines 8-10];

but, Koehler does not disclose,

- “the second device is arranged to distribute protected content comprising an indication of a lowest acceptable certificate version to the first device upon successful authentication of the first device”

however, Elley et al. do disclose,

- “At block 622 client Alice 104 transmits to resource server Bob 110 the group membership certificate associated with the highest group in the chain, i.e. the root group authorized for access on the resource ACL 114” [column 10 lines 41-44];

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Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "the second device is arranged to distribute protected content comprising an indication of a lowest acceptable certificate version to the first device upon successful authentication of the first device," in the invention as disclosed by Koehler for the purposes of permitting access to resources in accordance with a particular certified group (i.e. low, medium, or high clearance, etc).

Claim 11:

Koehler discloses a system comprising a plurality of devices, as in Claim 1 above, further comprising,

- "the second device is arranged to successfully authenticate the first device" (i.e. "Public key 20 is the owner's public key that can be used to authenticate any message sent by the owner. Certificate 10 is used to establish the authenticity of the owner's public key 20") [column 5 lines 5-8];
- "if a version indication in the group certificate is at least equal to the version indication in the group certificate of the second device" (i.e. "Validity period 25 typically defines a period of time for which certificate 10 is valid. Certificate 10 is considered expired beyond validity period 25 in which case public key 20 may no longer be used to authenticate messages") [column 5 lines 8-10];

but, Koehler does not disclose,

- "the second device is arranged to distribute protected content upon successful authentication of the first device"

however, Elley et al. do disclose,

- “At block 622 client Alice 104 transmits to resource server Bob 110 the group membership certificate associated with the highest group in the chain, i.e. the root group authorized for access on the resource ACL 114” [column 10 lines 41-44];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant’s invention to include, “the second device is arranged to distribute protected content upon successful authentication of the first device,” in the invention as disclosed by Koehler for the purposes of permitting access to resources in accordance with a particular certified group (i.e. low, medium, or high clearance, etc).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Oscar Louie whose telephone number is 571-270-1684. The examiner can normally be reached Monday through Thursday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Nasser Moazzami, can be reached at 571-272-4195. The fax phone number for Formal or Official faxes to Technology Center 2100 is 571-273-8300.

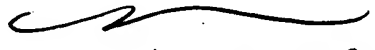
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OAL
11/01/2007

Nasser Moazzami
Supervisory Patent Examiner


11/2/07